## **CLAIMS**

- 1. A human HtrA2 protein to screen for an anti-cell-death factor for use in the treatment of a disorder caused by excessive cell-death.
- 2. The human HtrA2 protein according to claim 1, wherein the disorder caused by excessive cell-death is selected from a group consisting of neurodegenerative disease, cerebral ischemia, myocardial infarction and AIDS.
- 3. The human HtrA2 protein according to claim 1 or claim 2, wherein the human HtrA2 protein comprises an amino acid sequence from the 134<sup>th</sup> to the 458<sup>th</sup> of the sequence as set forth in SEQ ID NO: 2.
- 4. A recombinant cell expressing a human HtrA2 protein to screen for an anti-cell-death factor for use in the treatment of a disorder caused by excessive cell-death, wherein the cell comprises human HtrA2 gene or a variant thereof.
- 5. The recombinant cell expressing a human HtrA2 according to claim 4, wherein the disorder caused by excessive cell-death is selected from a group consisting of neurodegenerative disease, cerebral ischemia, myocardial infarction and AIDS
- 6. The cell expressing a human HtrA2 according to claim 4 or claim 5, wherein the human HtrA2 protein comprises an amino acid sequence from the 134<sup>th</sup> to the 458<sup>th</sup> of the sequence as set forth in SEQ ID NO: 2.
- 7. A method of screening for an anti-cell-death factor for use in the treatment of a disorder caused by excessive cell-death, wherein the method uses the human HtrA2 protein according to any one of claims 1 to 3.
- 8. A method of screening for an anti-cell-death factor for use in the treatment of a disorder caused by excessive cell-death, wherein the method uses the cell expressing a human HtrA2 protein according to any one of claims 4 to 6.
- 9. The method of screening for an anti-cell-death factor according to claim 7 or claim 8, wherein the disorder caused by excessive cell-death is selected from a group

consisting of neurodegenerative disease, cerebral ischemia, myocardial infarction and AIDS.

- 10. The screening method according to any one of claims 7 to 9, wherein the screening is for a factor that inhibits serine protease activity of human HtrA2 protein.
- 11. A recombinant cell expressing a human HtrA2 protein to screen for a remedy for a disorder caused by aberrant suppression of cell-death, wherein the cell comprises human HtrA2 gene or a variant thereof.
- 12. The recombinant cell expressing a human HtrA2 protein, which comprises human HtrA2 gene or a variant thereof, according to claim 11, wherein the disorder caused by aberrant suppression of cell-death is autoimmune disease or cancer.
- 13. A recombinant animal expressing a human HtrA2 protein to screen for a therapeutic drug for a disorder caused by aberrant suppression of cell-death, wherein the animal comprises human HtrA2 gene or a variant thereof.
- 14. The recombinant animal expressing a human HtrA2 protein, which comprises human HtrA2 gene or a variant thereof, according to claim 13, wherein the disorder caused by aberrant suppression of cell-death is autoimmune disease or cancer.
- 15. A method of screening for a remedy for a disorder caused by aberrant suppression of cell-death, wherein the method comprises administering a test substance to the cell according to claim 11 or claim 12 and measuring release of an HtrA2 protein from mitochondria to cytoplasm.
- 16. A method of screening for a remedy for a disorder caused by aberrant suppression of cell-death, wherein the method comprises administering a test substance to the animal according to claim 13 or claim 14 and measuring release of an HtrA2 protein from mitochondria to cytoplasm.
- 17. The method of screening for a remedy for a disorder caused by aberrant suppression of cell-death according to claim 15 or claim 16, wherein the disorder caused by aberrant suppression of cell-death is autoimmune disease or cancer.

18. The method of screening for a remedy for a disorder caused by aberrant suppression of cell-death according to any one of claims 15 to 17, wherein the HtrA2 protein released from mitochondria to cytoplasm is measured using an anti-HtrA2 protein antibody.